

Notice of Allowability

Application No.

09/671,638

Examiner

Dung X Nguyen

Applicant(s)

AL-DHAHIR, NAOFAL

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 29 July 2004.
2. ☒ The allowed claim(s) is/are 2, 3, 8, 9, and 13 - 20, reordered as 2,3,14, 19, 20, 8, 9, and 15 - 18, renumbered as 1 - 12, respectively.
3. ☒ The drawings filed on 28 September 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

August 10, 2004

Response to Arguments

1. Applicant's arguments filed on July 29, 2004 have been fully considered and subsequently found persuasive. Claims 1, 4 – 7, and 10 – 12 have been withdrawn.

Allowable Subject Matter

2. **Claims 2, 3, 8, 9, and 13 – 20 are allowed, reordered as 2, 3, 13, 14, 19, 20, 8, 9, and 15 – 18, renumbered as 1 – 12, respectively.** The following is an examiner's statement of reasons for allowance:

Regarding to the claimed invention, the prior art of record fails to show or render obvious of a method and its corresponding apparatus for improving operation of a receiver by canceling the spatio-temporal interference effects caused by the channel memory with a set of FIR filters in both feedforward and feedback filters. The coefficients of these FIR filters can be fashioned to provide a variety of controls.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harman (US patent # 6,442,198 B1) discloses a method and its corresponding apparatus for stabilizing a decision feedback equalizer.

Art Unit: 2631

Endres et al. (US patent # 6,337,878 B1) discloses an adaptive equalizer with decision directed constant modulus algorithm.

Camp et al. (US patent # 5,592,517) discloses cascade comb integrator interpolated filters.

Tasujimoto (US patent # 5,398,259) discloses a decision feedback equalizer for canceling CW interference.

Amrany et al. (US patent # 5,371,762) discloses technique utilizing signal storing devices for canceling signal dispersion.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (703) 305-4892. The examiner can normally be reached on Monday through Friday from 5:30 AM to 17:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Ghayour Mohammad H. can be reached on (703) 306-3034. The fax phone numbers for this group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

DXN

August 10, 2004

M. Ghayour
MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER